

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on March 16, 2009

Permit Number: **R30-05100011-2009**
Application Received: **November 25, 2009**
Plant Identification Number: **051-00011**
Permittee: **Rain CII Carbon LLC**
Facility Name: **Moundsville Calcining Plant**
Mailing Address: **3 Energy Road Moundsville, WV 26041**

Permit Action Number: *MM01* Revised: *March 29, 2010*

Physical Location:	Moundsville, Marshall County, West Virginia
UTM Coordinates:	515.30 km Easting • 4409.20 km Northing • Zone 17
Directions:	Drive south on Rt. 2 from Moundsville, the plant is about 10 miles south and is on the right (Ohio River side of route 2), between the AEP Kammer and Mitchell power plants.

Facility Description

This onshore calcining plant calcines raw (green) coke. Raw coke can be petroleum coke of various forms, which is a solid byproduct of the refining of petroleum, or any other carbonaceous material that can be calcined. The plant is mainly a solids handling facility.

Facility SIC Code: 2999 - Petroleum Refining and Related Industries - Petroleum and Coal Products.

The proposed modification covers the following changes:

1) Incorporates requirements of Permit R13-2095R (a Petroleum Coke Handling Barge Dock unloading facility) transferred to the Rain CII Carbon Company on September 16, 2008, but wasn't included in the permit renewal.

The Petroleum Coke Handling Barge Dock unloading facility is comprised of three permanently moored deck barges which will serve as a dock. A crane with a clamshell bucket and a hopper (1s), for unloading of green

coke, is mounted on one of the dock barges. The hopper will feed the green coke directly onto an inbound conveyor system (IBC1 to IBC2 to 4S) to transport the coke to the existing storage pile located at the Rain CII Carbon plant. Calcined coke from the plant is dumped onto covered outbound conveyor system (OBC1) which is adjacent to the plant's existing load-out building. The outbound conveyor moves the calcined coke to one of the barge docks where a loading spout (7S) mounted on a support tower transfers the material into the customer's barge. The maximum hourly throughput rate is 300 T/hr for green coke and 150 T/hr for calcined coke.

2) Pressure drop across the scrubber S-06 was revised from 1 and 10 inches of water to 0.5 and 10 inches of water.

3) Requirements 3.5.3. and 3.5.5 (boilerplate) were revised to include requirement for submission of an annual certification to the USEPA in electronic format only.

Emissions Changes

Regulated Pollutants	Potential Emissions Increase, TPY
Particulate Matter (PM ₁₀)	35.7
Total Particulate Matter (TSP)	73.3
<i>PM₁₀ is a component of TSP.</i>	

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons per year of Carbon Monoxide, Nitrogen Oxides, PM₁₀, and Sulfur Dioxide; and over 10 tons per year of Nickel compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutants and over 10 tons per year of a single HAP, Rain CII Carbon LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR7	Particulate Matter limits
	45CSR13	Construction permits
	45CSR30	Operating permit requirement.
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4 (a) (14). The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2095R	May 27, 1997	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

1) Permit R13-2095R - Section 8 was added to the permit to incorporate requirements of the Permit R13-2095R. Emission units BOC1, OC1, HOP1, IFB1, IBC1 and IBC2 and controls (baghouses BH1 and BH2, telescoping chute TC, de-dusting chemical solution CS, partial enclosures PE and full enclosures FE) were added to the Emission Units Table. Permit R13-2095R has transfer point IDs which are shown in parenthesis. There is no transfer point ID associated with the "Inbound green coke storage pad IC1" because this storage pad was part of the existing Rain CII facility, not part of the barge dock unloading facility, but was not listed in the Title V Permit.

The emissions from the unloading equipment, conveying and stockpile storage pads are subject to the 45CSR§7-3.1 (opacity limitation) and 45CSR§7-5.1 (minimization of fugitive particulate matter emissions), and are not subject to the weight emission limits of 45CSR§7-4.1 which apply to stacks from manufacturing equipment. Therefore 45CSR§7-4.1 was left out of requirement 8.1.8 (R13-2095R, requirement B.3). Monitoring Requirement 8.2.1 (visual emissions checks) was added for compliance demonstration with 45CSR§§7-3.1 and 5.1.

Outbound conveyor belt to OC1 (Emission Unit OBC1) has PTE of total PM at maximum annual material throughput rate approximately 1,324 TPY before each baghouse (BH1 and BH2), but with baghouses' 98% efficiency PM emissions are reduced to 26.5 TPY from each stack. The baghouses are subject to opacity monitoring requirement (8.2.1), pressure gauge maintenance Requirement 8.2.2 and recordkeeping requirement 8.4.1 (annual preventive maintenance).

Also, recordkeeping Attachments A and B of the Permit R13-2095R were added to this permit as Attachments B and C.

2) Requirement 5.2.2. - pressure drop across the scrubber S-06 was revised from 1 and 10 inches of water to 0.5 and 10 inches of water, based on rationale of Dr. Karim Zahedi, who designed changes to this scrubber. The scrubber will be effective at lower pressure drops than 1.0 inch of water. Everything depends on the amount of air in the system and the pressure drop would be substantially less if rates were at reduced or only one kiln was running. The pressure drop is not an indication of the scrubber performance but an indication of air flow. Performance may even be better with less air flow. The plant is running at reduced rates and/or running only one kiln at a time.

3) Requirement 7.2.1. - a typo was corrected.

Non-Applicability Determinations

None

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A

Ending Date: N/A

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

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Response to Comments

Not applicable.